UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/987,359	11/14/2001	Dieter Brueckner	Q65749	6935

7590   05/17/2005

SUGHRUE MION, PLLC
2100 Pennsylvania Avenue, NW
Washington, DC 20037-3213

EXAMINER
HO, ANDY

ART UNIT	PAPER NUMBER
2194	

DATE MAILED: 05/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

	Application No.	Applicant(s)
Office Action Summary	09/987,359	BRUECKNER ET AL.
	Examiner	Art Unit
	Andy Ho	2194

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _31 January 2005_.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-18_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-18_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _14 November 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some *   c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
   application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

U.S. Patent and Trademark Office
PTOL-326 (Rev. 1-04)   Office Action Summary   Part of Paper No./Mail Date

DETAILED ACTION

1. This action is in response to the amendment filed 1/31/2005.

2. Claims 1-18 have been examined and are pending in the application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1-18 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Rananand U.S Patent No. 5,935,213.

As to claim 1, Rananand teaches a network (network of Fig. 1) comprising

computer systems (plurality of computer systems 12s, Fig. 1), the network being divided

into segments connected with one another by coupling devices (a plurality of switching

nodes for transferring signals representing data among a number of devices, lines 25-

28 column 3), the coupling device determine from a received message, a data rate used

for transmitting the message (each switching node along the backward direction update

the rate control information in the RM cell, lines 41-43 column 5; lines 32-60 column 13),

wherein each coupling device generates a special message which contains a

previously established data rate as information, and sends the special message at a

fixed predefined data rate to neighboring computer systems or coupling devices (...each

switching node along the backward direction may update the rate control information in

the RM cell if it determines that, for example, because of network congestion or

otherwise, it is unable to accommodate the transfer rate at the level that is indicated in

the RM cell that it receives. Accordingly, when the RM cell reaches the source computer

system it will provide rate control information that regulates the rate to reflect the lower

of rate at which the destination computer system can receive cells CELL, or the lowest

rate that can be accommodated by any of the switching nodes along the connection...,

lines 41-52 column 5),

wherein the coupling device has a receiving device (input port module, line 45

column 7) and a bus interface (int interface 80, Fig. 5) for the same channel, the

receiving device being set to the fixed predefined data rate of the special message

(input port modules in switching node for buffering cells and forward RM cells prior to

transmission to the output port modules, lines 14-23 column 8) and the bus interface

being adjustable to be set to different data rates (...the transmit interface 84 also

receives backward RM cells over the communication links and provides them to the RM

cell stamping unit 86. The RM cell stamping unit receives the rate control information

generated by the RM cell information generator module 85, loads the rate control

information into the respective backward RM cells, and provides the backward RM cells

to the internal interface 80..., line 63 column 8 to line 5 column 9; lines 32-60 column

13),

wherein the receiving device and the bus operate in such a way that the data rate

of the bus interface is set to the data rate that is contained as the information in the

special message received by the receiving device (each switching node along the

backward direction may update the rate control information in the RM cell, lines 41-43

column 5; switching nodes will control the rate control information for RM cells traveling

in the backward direction, lines 55-63 column 6; lines 32-60 column 13).

Rananand does not explicitly teach subscribers. However, as disclosed above

(lines 31-40 column 3), the computer systems 12s process data in accordance with their

program instructions to generate processed data. In their processing, a computer

system 12 may, as a source computer system, need to transfer data to another

computer system destination 12 which may need to use the transferred information in its

operations. Therefore one of ordinary skill in the art would conclude that the system of

Rananand is in fact a system of publisher and subscriber wherein the subscriber

registers to receive the information or events from the publisher and use it in its

application.

As to claim 2, Rananand as modified further teaches a plurality of further

coupling devices that operate as the first coupling device (multiple switching nodes 11s,

Fig. 1; lines 25-44 column 3).

As to claim 3, Rananand teaches a communication system (Fig. 1) comprising:

a plurality of computer systems (plurality of computer systems 12s, Fig. 1) each

operable to transmit regular data messages to another computer system and each

computer system operable to receive regular data messages from another computer

systems (...computer systems 12s process data, in accordance with their program

instructions to generate processed data. In their processing, a computer system may,

as a source computer system, need to transfer data, processed data and/or program

instructions to another, destination, computer system 12s, which may need to use the

transferred information in its operations..., lines 31-40 column 3);

a plurality of coupling devices (a plurality of switching nodes for transferring

signals representing data among a number of devices, lines 25-28 column 3) operably

connected to said computer systems (switching nodes 11s connect to computer

systems 12s, Fig. 1), wherein each of said coupling devices corresponds to a respective

computer system (switching node 11(1) corresponds to computer system 12(1), etc, Fig.

1);

a communication medium (communication lines 13s, Fig. 1) operably connected

to each of said coupling devices and capable of bidirectionally transmitting the regular

data messages between said coupling devices (...the switching nodes are

interconnected by communication links to facilitate the transfer of data thereamong.

Each communication link is preferably bi-directional, allowing the switching nodes to

transmit and receive signals among each other and with computer systems connected

thereto over the same link..., lines 45-55 column 3),

wherein at least one of said coupling devices is operable to directly determine a

transmission rate of a transmitted regular data message and generate a special data

message which includes the determined transmission rate as information (...each

switching node along the backward direction may update the rate control information in

the RM cell if it determines that, for example, because of network congestion or

otherwise, it is unable to accommodate the transfer rate at the level that is indicated in

the RM cell that it receives. Accordingly, when the RM cell reaches the source computer

system it will provide rate control information that regulates the rate to reflect the lower

of rate at which the destination computer system can receive cells CELL, or the lowest

rate that can be accommodated by any of the switching nodes along the connection...,

lines 41-52 column 5).

Rananand does not explicitly teach subscribers. However, as disclosed above

(lines 31-40 column 3), the computer systems 12s process data in accordance with their

program instructions to generate processed data. In their processing, a computer

system 12 may, as a source computer system, need to transfer data to another

computer system destination 12 which may need to use the transferred information in its

operations. Therefore one of ordinary skill in the art would conclude that the system of

Rananand is in fact a system of publisher and subscriber wherein the subscriber

registers to receive the information or events from the publisher and use it in its

application.

As to claim 4, Rananand as modified further teaches the coupling device

transmits the special data message at a fixed transmission rate to at least others of said

coupling devices or said subscribers (switching node transfer the backward message to

the source computer system, lines 39-55 column 5).

As to claims 5-7, they are computer communication system claims of claim 1.

Therefore, they are rejected for the same reasons as claim 1 above.

As to claim 8, it is a computer communication system claim of claims 1 and 3.

Therefore, it is rejected for the same reasons as claims 1 and 3 above.

As to claim 9, Rananand as modified further teaches the communication
segments carry electrical signals (... digital communications systems for facilitating
communication of digital data in digital image, audio and video distribution systems and
among digital computer systems..., lines 6-10 column 1).

As to claim 10, Rananand as modified further teaches the communication
medium is a fiber optic medium (transmission medium of each communication link is
selected to comprise one or more fiber optic links, lines 48-51 column 3).

As to claim 11, it is a computer coupling device claim of claims 1 and 3-4.
Therefore, it is rejected for the same reasons as claims 1 and 3-4 above.

As to claim 12, it is a computer coupling device claim of claim 1. Therefore, it is
rejected for the same reasons as claim 1 above. Rananand as modified further teaches
a plurality of receiving devices (multiple input port modules 60s, Fig. 5); and a plurality
of bus interface devices (multiple int interface 80 of multiple output port modules 61s,
Fig. 5).

As to claim 13, it is a computer coupling device claim of claim 1. Therefore, it is
rejected for the same reasons as claim 1 above.

As to claim 14, it is a computer device claim of claim 1. Therefore, it is rejected
for the same reasons as claim 1 above. Rananand as modified further teaches a
control signal (bus 62, line 54 column 7).

As to claim 15, it is a computer device claim of claim 1. Therefore, it is rejected
for the same reasons as claim 1 above.

As to claim 16, Rananand as modified further teaches a bus interface device
input signal, operable to provide control information to said bus interface device (bus
carrying signal from bus 62 to int interface 80, Fig. 5).

As to claims 17-18, they are method claims of claim 1. Therefore, they are
rejected for the same reasons as claim 1 above.

Response to Arguments

4. Applicant's arguments filed 1/31/2005 have been fully considered but they are
not persuasive.

Applicant argued that Rananand reference is different from the claimed invention
in which in the claimed invention, the components in the communication path are
controlled to accommodate the rate at which the source transmits data (Remarks, first
complete paragraph page 11). In response, Rananand reference discloses steps that
are no different from the claimed invention regarding this limitation. As disclosed above,
Rananand teaches each switching node along the backward direction may update the
rate control information in the RM cell if it determines that, for example, because of
network congestion or otherwise, it is unable to accommodate the transfer rate at the
level that is indicated in the RM cell that it receives. Accordingly, when the RM cell
reaches the source computer system it will provide rate control information that
regulates the rate to reflect the lower of rate at which the destination computer system
can receive cells CELL, or the lowest rate that can be accommodated by any of the

switching nodes along the connection (lines 41-52 column 5). The reference meets the limitation as claimed.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andy Ho whose telephone number is (571) 272-3762. A voice mail service is also available for this number. The examiner can normally be reached on Monday – Friday, 8:30 am – 5:00 pm.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-2100.

Any response to this action should be mailed to:
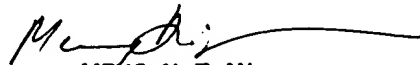
Commissioner for Patents

P.O Box 1450

Alexandria, VA 22313-1450

Or fax to:

- AFTER-FINAL faxes must be signed and sent to (703) 872 - 9306.

- OFFICAL faxes must be signed and sent to (703) 872 - 9306.

- NON OFFICAL faxes should not be signed, please send to (571) 273 – 3762

A.H
May 6, 2005

MENG-AL T. AN
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100